PROPOSED APPROPRIATION LANGUAGE

For Department of Energy expenses for privatization projects necessary for atomic energy defense environmental restoration and waste management activities authorized by the Department of Energy Organization Act (42 U.S.C.7101, et seq.), \$1,006,000,000 to become available October 1, 1997 and \$800,000,000 to become available October 1, 1998, all of which shall remain available until expended.

EXPLANATION OF CHANGE

This is a proposed new appropriation.

(Tabular dollars in thousands, narrative in whole dollars)

PROGRAM MISSION

Defense Environmental Management (EM) Privatization is an alternative business strategy for selected EM projects and activities from the traditional Management & Operating (M&O) contractors approach of doing business. A team of Headquarters and operations office staff from applicable programs has been assembled to work on this initiative and ensure the success of this innovative contracting strategy.

The mission of the Privatization program is to drive the cost of environmental cleanup projects down by increasing competition for open, fixed-price, contracts. Through privatization, EM will pay contractors only for contract deliverables, and for end products or services, such as treated waste, waste disposal, remediated soils, and services such as decontamination/decommissioning of facilities. The selected contractors are responsible for development of technologies, procurement of equipment, and construction/operation/financing of all facilities required to deliver the desired products and services. EM's privatization experience to date demonstrates that the Department can anticipate cost savings and cost avoidances of 25 to 40 percent using the privatization method versus the traditional M&O contracting approach.

Under the privatization account, the EM program will provide the financial incentives to the contractors to substantially reduce EM cleanup costs, while ensuring that an appropriate technical and financial risk/reward balance between the Department and the contractors is maintained. The use of privatization is expected to result in clean-up accomplished sooner in comparison to the traditional M&O approach, thus supporting the EM vision of completing substantial cleanup at most EM sites within the next decade.

This appropriation account has been created so that the Budget Authority (BA) is available for the capital portion of privatization contract obligations. Privatization contractors are expected to secure private financing for the construction of any facilities required to deliver the end product or services. In the unlikely event that the Federal Government terminates contracts, the requested BA would be used to satisfy the termination liability of the Federal Government. The privatization funds will eventually be outlayed to cover the contractors investment using capital amortization criteria as part of the unit cost of the product or service. The operating portion of the privatization contracts will come from other EM appropriation accounts for the years of operation. Generally, Budget Outlays (BO) of the capital portion will not occur until the privatization contractors deliver the products and services in accordance with contract performance specifications. By special agreement with the Office of Management and Budget, no outlays are expected in the year in which privatization BA is received.

The GOALs of the privatization program are:

- Reduce cost of environmental cleanup on a life cycle basis.
- Increase private sector competition in the environmental cleanup program, while providing incentives for competency, efficiency, innovation and accountability.
- Perform more cleanup for the funds expended.

The Performance Measures related to these goals are:

- Increase the number of privatization projects.
- Increase the number of environmental cleanups completed.
- Improve the documentation of life cycle financial estimates for privatized projects to demonstrate savings and cost avoidances.
- Increase the number of open, fixed-price contracts for cleanup projects.
- Improve the documentation of schedule improvements as a result of privatized workscope.

(Tabular dollars in thousands, narrative in whole dollars)

PROGRAM FUNDING PROFILE

	FY 1 Curr Appropr	rent	Ori	1997 ginal priation ^b	1997 stments	Cu	1997 rrent priation	FY 1998 Request	FY 1999 Request ^c
Defense EM Privatization									
Hanford Tank Waste Treatment	\$	0	\$	0	\$ 0	\$	0	\$ 427,000	\$325,000
Privatization Initiatives		0		0	 0		0	579,000	475,000
Total, Defense EM Privatization	\$	0	\$	0	\$ 0	\$	0	\$1,006,000	\$800,000

^a\$68M for Hanford Tanks was appropriated under the Defense Environmental Restoration and Waste Management appropriation, Waste Management program.

^b\$170M for Hanford Tanks was appropriated under the Defense Environmental Restoration and Waste Management appropriation, Privatization account -AND-\$160M for various privatization initiatives was appropriated under the Defense Environmental Restoration and Waste Management appropriation, Fixed Asset account.

^cFY 1999 distribution by program area may change based on the EM Ten-Year Plan.

(Tabular dollars in thousands, narrative in whole dollars)

PROGRAM FUNDING BY SITE

Operations Office/ Installation	FY 1996 Current Appropriation		FY 1997 Original Appropriation		FY 1997 Adjustments		FY 1997 Current Appropriation		FY 1998 Request
ALBUQUERQUE OPERATIONS OFFICE									
Carlsbad Area Office (NM)	\$	0	\$	0	\$	0	\$	0	\$ 29,200
Subtotal, Albuquerque IDAHO OPERATIONS OFFICE	\$	0	\$	0	\$	0	\$	0	\$ 29,200
Idaho Operations Office (ID)	\$	0	\$	0	\$	0	\$	0	\$ 118,200
Subtotal, Idaho OAK RIDGE OPERATIONS OFFICE	\$	0	\$	0	\$	0	\$	0	\$ 118,200
Oak Ridge Operations Office (TN)	\$	0	\$	0	\$	0	\$	0	\$ 162,000
Subtotal, Oak Ridge OHIO FIELD OFFICE	\$	0	\$	0	\$	0	\$	0	\$ 162,000
Fernald Envir Mgmt Project (OH)	\$	0	\$	0	\$	0	\$	0	\$ 41,100
Subtotal, Ohio RICHLAND OPERATIONS OFFICE	\$	0	\$	0	\$	0	\$	0	\$ 41,100
Richland Operations Office (WA)	\$	0	\$	0	\$	0	\$	0	\$ 427,000
Subtotal, Richland ROCKY FLATS FIELD OFFICE	\$	0	\$	0	\$	0	\$	0	\$ 427,000
Rocky Flats Field Office (CO)	\$	0	\$	0	\$	0	\$	0	\$ 36,600
Subtotal, Rocky Flats SAVANNAH RIVER OPERATIONS OFFICE	\$	0	\$	0	\$	0	\$	0	\$ 36,600
Savannah River Operations Office (SC)	\$	0	\$	0	\$	0	\$	0	\$ 191,900
Subtotal, Savannah River	\$	0	\$	0	\$	0	\$	0	\$ 191,900
Total, Privatization	\$	0	\$	0	\$	0	\$	0	\$1,006,000

(Tabular dollars in thousands, narrative in whole dollars)

ENVIRONMENTAL MANAGEMENT

Comparability Crosscut Table

	FY	FY 1996		FY 1997		98		
Appropriation/Program/Activity	Appı	ropriation	Appr	opriation	Reque	est	\$ Change	% Change
Defense Environmental Restoration and Waste Management,								
Waste Management Program								
Hanford Tank Waste Treatment, Richland	\$	68,000	\$	0	\$	0	\$ 0	0%
(includes prior year carryover of \$15M)								
Subtotal	•	68,000		0		0	0	0%
Defense Environmental Restoration and Waste Management,								
Privatization								
Hanford Tank Waste Treatment, Richland		0		170,000		0	-170,000	-100%
Subtotal		0		170,000		0	-170,000	-100%
Defense Environmental Restoration and Waste Management,								
Fixed Asset Acquisition (Privatization Initiatives)								
Advanced Mixed Waste Treatment, Idaho		0		70,000		0	-70,000	-100%
Broad Spectrum Low-Level Mixed Waste Treatment,		0		15,000		0	-15,000	-100%
Oak Ridge								
Transuranic Waste Treatment, Oak Ridge		0		65,000		0	-65,000	-100%
Waste Water Treatment Plant, Rocky Flats		0		10,000		0	-10,000	-100%
Subtotal		0		160,000		0	-160,000	-100%
Defense Environmental Management Privatization								
Hanford Tank Waste Treatment, Richland		0		0	427	,000	427,000	>999%
Privatization Initiatives, Various Locations		0		0	579	,000	579,000	>999%
Subtotal		0		0	1,006	,000	1,006,000	>999%
Total Privatization	\$	68,000	\$	330,000	\$ 1,006	,000	\$ 676,000	+205%

Note: The funding presented above is for comparison purposes only and addresses funds from four different appropriation sources. This comparison is necessary to gain a better understanding of resources being applied to the Privatization initiative. The budget narrative statements contained in this submission address only the FY 1998 budget request.

(Tabular dollars in thousands, narrative in whole dollars)

PROGRAM PERFORMANCE SUMMARY

The Defense Environmental Management Privatization activity is being requested as a separate appropriation account in the FY 1998 budget submission. This will focus privatization efforts in one area of the EM budget, which were previously supported from several different budget accounts. The budget comparability table presented on the previous page attempts to show the overall picture of privatization being supported for FY 1996, FY 1997, and FY 1998.

The total funding appropriated for the EM Privatization activity in FY 1997 was \$330 million from two different budget accounts. This included \$170 million for the Hanford Tank Waste Treatment, funded under the Defense Environmental Restoration and Waste Management appropriation, Privatization account; and an additional \$160 million funded under the Fixed Asset Acquisition account. The \$160 million was for the capital portion of the following projects:

- Advanced Mixed Waste Treatment (Idaho)
- Broad Spectrum Low Level Mixed Waste Treatment (Oak Ridge)
- Transuranic Waste Treatment (Oak Ridge)
- Waste Water Treatment Plant (Rocky Flats)

Contracts for the Oak Ridge Broad Spectrum Low Level Mixed Waste and Transuranic Waste projects and the Rocky Flats Waste Water Treatment Plant project are on schedule for awards in FY 1997. The Advanced Mixed Waste Treatment Facility contract has already been awarded.

The Department is gaining valuable experience in the successful execution of privatization projects. For example, in FY 1997, the Department awarded the fixed-price Advanced Mixed Waste Treatment Facility contract at the Idaho National Engineering Laboratory to a team led by British Nuclear Fuels, Ltd. The cost savings and cost avoidances anticipated from this privatization project will be several hundred million dollars over the cost plus approach that was planned under the Management and Operating (M&O) contract.

The Department's largest privatization project is the Tank Waste Treatment project at the Hanford site in the State of Washington. This project is a technically complex, multiphase effort, with two contractor teams selected for Phase 1A. Phase 1A includes the delivery of technical, regulatory, and business planning documents to allow the Department to proceed to Phase 1B, which involves the construction and operation of demonstration scale processing facilities to process tank waste (6-13% of the total waste in the Hanford tanks). The total Phase I cost for capital and operating costs for the Hanford Tank Waste Treatment project is approximately \$4 to \$6 billion.

(Tabular dollars in thousands, narrative in whole dollars)

ENVIRONMENTAL MANAGEMENT

I. Mission Supporting Goals and Objectives

The Defense EM Privatization activity includes continuation of privatization activities at the Hanford, Washington site and proposes eleven new privatization projects at several DOE sites.

Hanford Tank Waste Treatment:

A two-phased approach to Hanford Tank Waste Treatment privatization has been implemented. This approach was considered to be desirable from an economic feasibility standpoint. The first of the two phases is a commercial demonstration phase where private vendors will treat sufficient waste to demonstrate to both DOE and to the financial community that they, the private vendors, are capable of treating the remainder of the tank waste in a larger, second phase effort. Phase II will complete the treatment of the tank wastes.

Phase I lasts from FY 1996 through FY 2007 or longer, with options to treat additional wastes. Two vendors could be selected to treat between 6 and 13 percent of the tank waste. The scope of Phase I will involve for each successful vendor:

- Sequential retrieval/transfer by DOE of waste (in batches, not mixed) from selected tanks to two existing tanks designated as feed tanks (one assigned to each vendor).
- Vendor retrieval/transfer of waste from its feed tank to vendor's facility.
- Vendor pretreatment to separate tank waste into low- and high-activity waste fractions, immobilization of the low-activity waste fractions; and as an option, integrated treatment of tank waste resulting in immobilization of the high-activity waste fraction.
- Vendor deactivation of all vendor-supplied facilities and equipment.
- Vendor would own facility on leased DOE land in the 200 area of the Hanford Site.

Phase I is divided into two parts: A technical approach (Phase IA) and construction/operation (Phase IB). The Department would expect vendor(s) to establish a predetermined level of equity in the plant to provide assurance to both DOE and the financial community at the time of the Department's fixed payment. (DOE will not approve or buy the vendor technology or design.)

- In the Request for Proposals, DOE provided bounding information on waste physical properties, chemistry, radionuclide content and volume, nuclear safety requirements and oversight process, treated waste form performance specifications, and a list of additional information or services DOE will furnish to successful contractors.
- Contractors will privately finance the design, permitting, and construction of the facilities; operate the facility; and ultimately be responsible for deactivation in accordance with applicable regulations.
- A partial payment will be made to each contractor when they satisfactorily complete Phase IA.

I. <u>Mission Supporting Goals and Objectives</u> - (continued)

- The Department will hold contractors responsible for technical/cost performance and pay only for treated waste product meeting contract performance specifications (except for the fixed payment following the initial design period).
- Vendors will be subject to applicable Tri-Party Agreement enforceable deadlines (existing or renegotiated) as incorporated in the contract.

New Privatization Projects

For FY 1998, a number of projects were considered and the following initiatives were selected for support in the FY 1998 budget submission:

- Contact Handled Transuranic Waste Transportation; Carlsbad, New Mexico
- Low Activity Waste Treatment Project; Idaho Falls, Idaho
- Power Burst Facility Deactivation; Idaho Falls, Idaho
- Spent Nuclear Fuel Dry Storage; Idaho Falls, Idaho
- Environmental Management/Waste Management Disposal; Oak Ridge, Tennessee
- Transuranic Solid Waste Treatment; Oak Ridge, Tennessee
- Waste Pits Remedial Action; Fernald, Ohio
- Silo 3 Residue Waste Treatment; Fernald, Ohio
- Decommission Building 886; Rocky Flats, Colorado
- Decommission Building 779; Rocky Flats, Colorado
- Spent Nuclear Fuel Transfer and Storage; Savannah River, South Carolina

II. Funding Schedule

Program Activity	 1996 priation_	 1997 priation	FY 1998 Request	\$ Change	% Change
Defense Environmental Management Privatization					
Hanford Tank Waste Treatment, Richland	\$ 0	\$ 0	\$ 427,000	\$ 427,000	>999%
Privatization Initiatives, Various Locations	 0	 0	579,000	579,000	>999%
Subtotal	 0	0	1,006,000	1,006,000	>999%
Total Privatization	\$ 0	\$ 0	\$ 1,006,000	\$1,006,000	>999%

III. Performance Summary

	FY 1996	<u>FY</u>	<u> 1997</u>	<u>FY 1998</u>
Hanford Tank Waste Remediation System; Hanford, Washington:				
 Vendors conduct design and permitting activities (using prior year funding) to facilitate provision of a technical report, schedule, regulatory compliance program, business plan and final proposal for Phase IB (detailed design, construction and operation of demonstration facilities). Each of the two vendors will be paid \$27 million upon the satisfactory completion of this Phase IA work. These funds will come from the \$68 million appropriated in FY 1995 and FY 1996 for Hanford Tanks under the Defense Environmental Restoration and Waste Management Appropriation. 	\$ 0	\$	0	\$ 0
• In conjunction with the dollars appropriated in FY 1997, downselect for Phase IB is scheduled for May 1998. Budget Authority requested for selected contractor to design and construct facilities for treatment and immobilization of 6 to 13% of Hanford Tank Wastes. The contractor shall be paid for treated wastes meeting contract specification, outlays will begin in FY 2002 and will continue through approximately FY 2007. Life cycle cost savings from 10 to 30% are projected. Life cycle capital costs from \$2.5 to \$3.5 billion and life cycle operating costs of \$1.5 to \$2.5 billion are estimated for Phase I. The \$170 million appropriated in FY 1997 and this \$427 million requested in FY 1998 will provide sufficient confidence to the vendors and the financial community to allow the vendors to obtain competitive financing for the \$2.5 to \$3.5 billion of capital costs.	C		O^d	427,000
Contact Handled Transuranic Waste Transportation; Carlsbad, New Mexico:				
 Budget Authority requested for capital costs for a private vendor to provide transportation of transuranic waste from generator sites to the Waste Isolation Pilot Plant disposal facility using contractor financed, owned and operated tractor trailers and nuclear packaging equipment to ship a quantity of 17 trucks per week. Waste will be shipped from 25 sites. A standard fee will be paid based on quantity shipped and mileage. Outlays to begin in FY 1999 and continue through FY 2006. This is a recompetition of M&O subcontractor services. Life cycle cost savings estimated in excess of 20% for a total estimated cost of \$787 million. 	C		0	29,200

^d\$170M was appropriated under the Defense Environmental Restoration and Waste Management appropriation, Privatization account.

III. Performance Summary (Continued)

	<u>FY 1996</u>		FY 1997		FY 1998
Low Activity Waste Treatment Project; Idaho Falls, Idaho:					
• Budget Authority requested for capital costs for a private contractor to finance, design, construct and operate a facility to treat 7 million gallons of low-level waste from the Idaho Chemical Processing Plant, the Advanced Test Reactor, and other sources. Operating account will fund some preliminary design and permitting costs in FY 1997 and FY 1998 to maintain compliance schedule The contractor will be paid for treated waste meeting contract specifications on a dollars per unit cost. Outlays to begin in FY 1999 and continue through approximately FY 2024. Life cycle cost savings are estimated in excess of 15% for a total estimated cost of \$401 million, which includes an additional Budget Authority requirement in FY 1999 of \$61.2 million.	\$	0	\$	0	\$ 2,600
Power Burst Facility Deactivation; Idaho Falls, Idaho:					
 Budget Authority requested for a private contractor to plan, design, and execute the deactivation of the Power Burst Facility (PBF) (a shutdown reactor) at Idaho, including transfer of Spent Nuclear Fuel to the Idaho Chemical Processing Plant, removal and treatment of PBF fuel pool water, and disposal of 37,000 gallons of reactor water and 76,000 gallons of secondary cooling loop water contaminated with chromates. Payment is projected at the completion of deactivation and acceptance by the Federal Government in FY 2000. Projected cost savings are greater than 15%. 		0		0	7,900
Spent Nuclear Fuel Dry Storage; Idaho Falls, Idaho:					
• Budget Authority is requested for the capital construction of a dry storage facility capable of transferring and cleaning spent fuel rods. This project satisfies a Federal court ordered agreement between the State of Idaho, DOE and the Navy that all spent nuclear fuel be out of wet storage by 2023 and shipped out of the State of Idaho by 2035. The Nuclear Materials and Facility Stabilization operating account will fund some preliminary design and permitting activity in FY 1998. The construction and operation service will be provided through an open fixed-price competition, with the price including contractor design, licensing and fabrication. Outlays will commence in FY 1999 and continue through FY 2006. Cost savings are projected to be greater than 15% for a projected total estimated cost of \$133 million.		0		0	107,700
Environmental Management/Waste Management Disposal; Oak Ridge, Tennessee:					
 Budget Authority is requested for the purchase of waste disposal services from a private vendor for low-level, hazardous, Toxic Substance Control Act-defined, and mixed wastes generated at Oak Ridge. The contractor would be awarded a fixed unit price contract for waste disposal services including permitting, construction, and operation of the facility. Outlays to begin in FY 2001 and continue through FY 2010. Cost savings are projected to be in excess of 40% for a total estimated cost of \$165 million. 		0		0	85,000

III. Performance Summary (Continued)

	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>
Transuranic Solid Waste Treatment; Oak Ridge, Tennessee:			
• Budget Authority is requested for a private contractor to design, permit, finance, and construction a Transuranic (TRU) Solid Waste Treatment facility at Oak Ridge to treat contact-handled and remote-handled solid TRU waste for shipment to the Waste Isolation Pilot Plant in New Mexico. Oak Ridge contains the largest inventory of remote-handled TRU solid wastes within the DOE complex. The existing remote-handled TRU waste is contained in concrete casks and must be repackaged prior to off-site shipment. The project will be procured through an open fixed-price competitive bid/award. Private vendor construction completion is projected for FY 2003. DOE will compensate the contractor on a per unit basis for waste treated to performance specifications. Treatment operations are to begin in FY 2003 and last through FY 2006. Cost savings projected in excess of 15% for a total estimated cost of \$252 million.	\$ 0	\$ 0	\$ 77,000
Waste Pits Remedial Action; Fernald, Ohio:			
• Budget Authority requested for design and construction of a contractor owned and operated facility for the excavation, processing, treatment, and load-out of about 700,000 tons of Fernald Environmental Management Project waste for disposal at a permitted commercial disposal facility. Funding for the document preparation phase will be provided from the FY 1997 and FY 1998 Environmental Restoration program within the Defense Environmental Restoration and Waste Management appropriation. The contractor will be paid on a unit rate for quantity of processed waste during the operational phase. Privatization outlays will begin in FY 1999 and continue through FY 2005. Cost savings are projected to be greater than 10% for a total estimated cost of \$107 million.	0	0	30,200
Silo 3 Residue Waste Treatment; Fernald, Ohio:			
• Budget Authority is to fund contractor design, permit, finance, construction and operation of necessary treatment facilities. The contractor will process, package, ship, and dispose of residues from Silo 3, Fernald Operable Unit #4 Remediation. The contractor will be required to reprocess off-specification product at their own expense. Outlays will begin in FY 1999 or FY 2000 with an expected three year operational period until FY 2002. Cost savings are projected to be greater than 10% for a total estimated cost of \$23 million.	0	0	10,900

III. Performance Summary (Continued)

		<u>FY 1996</u>		FY 1997		FY 1998
<u>Decommission Building 886; Rocky Flats, Colorado</u> :						
• The vendor will finance and provide systems for the complete decommissioning and dismantlement of the Building 886 cluster at Rocky Flats. The scope of the project includes removal of highly-contaminated equipment, tanks, glove boxes, and ventilation ducts for shipment to an off-site facility for decontamination, size reduction, and packaging to accelerate building decontamination and demolition. All waste packaged off-site must meet the Rocky Flats Site Waste Acceptance Criteria and be returned for interim storage. Payment will be made upon the decommissioning and packaging of equipment and upon complete dismantlement of the Building 886 "cluster." Outlays will occur upon project completion in FY 1999. Decommissioning period of performance projected to be 24 months. Cost savings projected to be greater than 40%.	\$	0	\$	0	\$	13,500
<u>Decommission Building 779; Rocky Flats, Colorado</u> :						
• The vendor will finance and provide systems for the complete decommissioning and dismantlement of the Building 779 cluster at Rocky Flats. The scope of the project includes removal of highly-contaminated equipment, tanks, glove boxes, and ventilation ducts for shipment to an off-site facility for decontamination, size reduction, and packaging to accelerate building decontamination and demolition. All waste packaged off-site must meet the Rocky Flats Site Waste Acceptance Criteria and be returned for interim storage. Payment will be made upon the decommissioning and packaging of equipment and upon complete dismantlement of the Building 779 "cluster." Cost savings are projected to be greater than 20%. Decommissioning period of performance is projected to be 36 months.		0		0		23,100
Spent Nuclear Fuel Transfer and Storage; Savannah River, South Carolina:						
• This initiative is for an open fixed-price competitive procurement for the preparation and interim dry storage of ~18,000 aluminum-clad spent nuclear fuel rods at Savannah River for shipment and disposal at a Nuclear Regulatory Commission-licensed geologic repository. Financing, design, permitting, construction and operation are the responsibility of the contractor. After shipment of the fuel rods, the contractor would be responsible for deactivation and clean-out of the facility. The contractor would be paid when spent fuel rods are prepared and stored in dry storage on a fixed-unit price determined at the time of contract award. Outlays for capital reimbursement are expected to begin in FY 2002 and continue for five years. Outlays for operating costs are projected for a 35 year life cycle followed by deactivation and cleanout of the storage facility. A total estimated cost of \$1.3 billion is projected, based upon an approximate cost savings of 10%.		0		0		191,900
Total Privatization	\$	0	\$	0	\$ 1	,006,000

III. Performance Summary (Continued)

EXPLANATION OF FUNDING CHANGES FY 1997 TO FY 1998:

NOTE: Does not reflect change from FY 1997 for \$160 million appropriated under the Defense Environmental Restoration and Waste Management, Fixed Asset Acquisition account.

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Hanford Tank Waste Remediation System:

• Increase in FY 1998 for Phase IB of the Hanford Tank project. Does not reflect change from FY 1997 for \$170M appropriated under the Defense Environmental Restoration and Waste Management, Privatization account.

New FY 1998 Privatization Projects:

• Eleven new privatization projects account for \$579 million. This request covers the capital portion which will be outlayed as part of succeeding year operating budget requests on a project-by-project basis. Capital amortization however will not occur until construction is complete. Decontamination project outlays will occur in total upon project completion. Outlays for these new projects, in any case, are not expected to begin before FY 1999.

579,000